## CLAIMS

1	1. A method of providing multilevel information about
2	video-on-demand services, comprising the steps:
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4	generating a display, on a computer display screen, of a
5	tree having a plurality of nodes; and
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7	embedding in the nodes information about video-on-demand
8	services.
1	2. A method according to Claim 1, wherein the embedding
2	step includes the steps of:
3	step includes the steps of.
ر 4	identifying in a first catalog each of a group of first
	aspects of video-on-demand services;
5	aspects of video-on-demand services,
6	the distriction is a good datalog each of a group of second
7	identifying in a second catalog each of a group of second
8	aspects of video-on-demand services;
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10	forming a matrix from the first and second groups; and
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12	embedding the matrix in one of the nodes.
1	3. A method according to Claim 2, wherein the step of
2	identifying in the first catalog includes the step of

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identifying in the first catalog each of a group of users

of the video-on-demand service.

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- 1 4. A method according to Claim 1, wherein the embedding 2 step includes the step of embedding information in the 3 nodes in the form of matrices.
  - 5. A method according to Claim 4, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:

usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education, geography, and any combination of the above.

- 6. A system for providing multilevel information about video-on-demand services, comprising:
- a computer display screen;
- means for generating a display, on the computer display screen, of a tree having a plurality of nodes; and
- 9 means for embedding in the nodes information about video-10 on-demand services.
- 7. A system according to Claim 6, wherein the embedding means includes:



4	means for identifying in a first catalog each of a group
5	of first aspects of video-on-demand services;
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7	means for identifying in a second catalog each of a group
8	of second aspects of video-on-demand services;
9	
10	means for forming a matrix from the first and second
11	groups; and
12	
13	means for embedding the matrix in one of the nodes.
1	8. A system according to Claim 7, wherein the means for
2	identifying in the first catalog includes means for
3	identifying in the first catalog each of a group of users
4	of the video-on-demand service.
1	9. A system according to Claim 6, wherein the embedding
1 2	9. A system according to Claim 6, wherein the embedding means includes means for embedding information in the
2 3	means includes means for embedding information in the nodes in the form of matrices.
2 3	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices
2 3 1 2	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-
2 3 1 2 3	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices
2 3 1 2 3 4	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:
2 3 1 2 3 4 5	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services
2 3 1 2 3 4 5 6	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics,
2 3 1 2 3 4 5 6 7	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates
2 3 1 2 3 4 5 6 7 8	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer
2 3 1 2 3 4 5 6 7 8 9	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations,
2 3 1 2 3 4 5 6 7 8 9	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education,
2 3 1 2 3 4 5 6 7 8 9	means includes means for embedding information in the nodes in the form of matrices.  10. A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:  usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations,

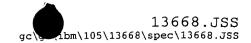
	2	tangibly embodying a program of instructions executable
	3	by the machine to perform method steps for providing
	4	multilevel information about video-on-demand services,
	5	said method steps comprising:
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	7	generating a display, on a computer display screen, of a
	8	tree having a plurality of nodes; and
	9	
	10	embedding in the nodes information about video-on-demand
	11	services.
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	1	12. A program storage device according to Claim 11,
Ω	2	wherein the embedding step includes the steps of:
<u> </u>	3	
	4	identifying in a first catalog each of a group of first
Ų.	5	aspects of video-on-demand services;
<u> </u>	6	
	7	identifying in a second catalog each of a group of second
] 1	8	aspects of video-on-demand services;
1	9	
7	10	forming a matrix from the first and second groups; and
	11	
	12	embedding the matrix in one of the nodes.
	1	13. A program storage device according to Claim 12,
	2	wherein the step of identifying in the first catalog
	3	includes the step of identifying in the first catalog
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11. A program storage device readable by machine,

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each of a group of users of the video-on-demand service.

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1	14. A program storage device according to Claim 11,
2	wherein the embedding step includes the step of embedding
3	information in the nodes in the form of matrices.

15. A program storage device according to Claim 14, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:

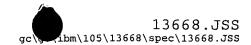
usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education, geography, and any combination of the above.

- 16. A method as recited in claim 1, wherein the tree is displayed top down.
- 17. An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing provision of multilevel information about relationships between users and items of video-on-demand services, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1.



1	18. A method for representing interconnection of a
2	plurality of elements of a video-on-demand system, the
3	method comprising:
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5	providing a first catalog for a first subset of said
6	elements, and providing a second catalog for a second
7	subset of said elements;
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9	creating a matrix of connection cells formed by an
10	intersection of a pair of elements, wherein a first
11	element of each pair is taken from the first catalog and
12	a second element of each pair is taken from the second
13	catalog; and
14	
15	forming a connection representation for at least a subset
16	of the pairs.
1	19. A method as recited in claim 18, wherein at least one
2	element is a catalog of sub-elements, and the method
3	further comprises the step of including all sub-elements
4	in the matrix.
1	20. A method as recited in claim 18, wherein at least one
2 .	of the catalogs includes a plurality of sub-catalogs.
1	21. A method as recited in claim 18, wherein at least a
2	portion of one catalog is formed using combinatorial
3	operations upon elements of other catalogs.
1	22. A method as recited in claim 18, further comprising

displaying at least one portion of the matrix.



1	23. A method as recited in claim 18, further comprising
2	employing a wizard to form at least a subset of the
3	elements.
1	24. An article of manufacture comprising a computer

24. An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing representation of interconnection of a plurality of elements of a video-on-demand system, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 18.

## 25. An architecture comprising:

a matrix module forming a video-on-demand information system matrix having at least one matrix row element and at least one matrix column element, an intersection of each said at least one matrix row element with each said at least one matrix column element forming a matrix cell;

a set of video-on-demand elements, a first subset of said set having a connection requirement with a second subset of said set;

a first catalog including at least one video-on-demand element forming said at least one matrix row element; and

a second catalog including at least one video-on-demand element forming said at least one matrix column element,

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wherein each matrix cell represents a video-on-demand
connection between each video-on-demand element of the
first catalog and each video-on-demand element of the
second catalog to enable systematic cooperation among
video-on-demand elements according to a video-on-demand
requirement.

- 1 26. An architecture as recited in claim 25, wherein at 2 least one video-on-demand element is a catalog of 3 video-on-demand sub-elements.
  - 27. An architecture as recited in claim 25, wherein at least one video-on-demand element is a catalog of elements only peripherally related to video-on-demand.
  - 28. An architecture as recited in claim 27, wherein the catalog of elements only peripherally related to video-on-demand includes an item selected from the group of items including customer habits, customer credit card and/or internet purchases, customer's friends, and customer product data.
- 29. A method of providing multilevel information about a plurality of video-on-demand related entities and resources, comprising the steps:

generating a display, on a computer display screen, of a tree having a plurality of nodes; and

8 embedding in the nodes information about a plurality of 9 video-on-demand related entities and resources.

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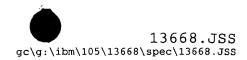
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1	30. A method as recited in claim 29, wherein the
2	plurality of video-on-demand related entities and
3	resources include an entity and/or resource selected
4	from: video-on-demand providers; video-on-demand
5	composers/manufacturers; video-on-demand related sellers;
6	video-on-demand advertisers; video manufacturers; video
7	databases; video renters; and any combination of the
8	above.

- 31. An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing provision of multilevel information about relationships between users and items of a plurality of video-on-demand related entities and resources, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 30.
- 32. An article of manufacture as recited in claim 31, wherein the video-on-demand resources are holdings of groups of products.
- 33. An article of manufacture as recited in claim 31,
   wherein the relationships include inventory information.
- 1 34. A method as recited in claim 1, further comprising 2 implementing at least one process taken from a group of

processes including: matrix and/or element expansion;
logical set manipulation of catalog elements to form
changed and/or new matrices, changed and/or new elements,
and/or changed and/or new catalogs; catalog manipulation
and/or combination; formation of one or more
super-catalogs and/or super-elements representing a
catalog of catalogs; display of a plurality of trees
and/or portions of trees in a variety of tree formats and
shapes; and formation and/or manipulation of sub-catalogs
and/or sub-elements from one or more catalogs, matrices
and/or elements.